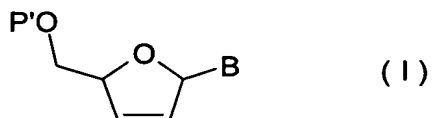


This listing of claims will replace all prior versions, and listings, of claims in the application:

1.(Currently Amended) A process ~~Process~~ for preparing 2',3'-didehydro-2',3'-dideoxynucleoside ~~dideoxynucleosides~~ of formula

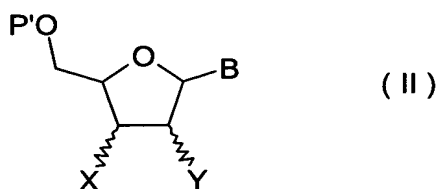


in which

P' represents hydrogen or a suitable protecting group P, and

B represents a natural or modified, optionally substituted purine or pyrimidine base or a five- or six-membered monocyclic or eleven- or twelve-membered bicyclic, optionally substituted heterocyclic system containing at least one nitrogen atom;

which comprises ~~the reductive elimination reaction of the~~ reducing a compound of formula



in which

X and Y represent, alternately, a halogen or an acyloxy group RCOO-,

P' and B have the meanings given above,

by reaction with divalent zinc metal and ~~a suitable~~ an activating agent in an organic phase to provide the compound of formula 1, and,

~~characterized in that the divalent zinc is removed by precipitation, from an organic phase, of the corresponding zinc sulfide, by addition of~~ adding a sulfide solution of an alkali metal sulfide or alkaline-earth metal sulfide to precipitate divalent zinc as zinc sulfide from said organic phase.

2.(Currently Amended) The process ~~Process~~ according to Claim 1, in which:

P' represents an acyl group RCO-, in which R represents a C₁-C₅ alkyl R¹; ~~preferably a methyl,~~ or a group R¹COOC(R²R³)-, in which R¹, R² and R³ represent a C₁-C₅ alkyl; ~~preferably a methyl;~~

B represents an optionally substituted natural purine or pyrimidine base; ~~preferably adenine, inosine, 5-F-cytosine, hypoxanthine or thymine;~~

X and Y represent, alternatively, bromine and an acyloxy group RCOO-, in which R represents a C₁-C₅ alkyl R¹; ~~preferably methyl,~~ or a group R¹COOC(R²R³)-, in which R¹, R² and R³ represent a C₁-C₅ alkyl R¹; ~~preferably a methyl.~~

3.(Currently Amended) The process ~~Process~~ according to Claim 1, in which the said activating agent is ~~chosen from~~ selected from the group consisting of copper, acetic acid, [[and]] ammonium salt, [[or]] phosphonium salt, and mixtures thereof ~~salts, preferably ammonium or phosphonium salts.~~

- 4.(Currently Amended) The process ~~Process~~ according to Claim 1, in which the said organic phase is a solvent chosen selected from the group consisting of solvents such as tetrahydrofuran, dimethylacetamide, ~~alcohols~~alcohol, acetonitrile, chlorinated solvents-solvent, [[and]] dimethyl sulfoxide, and mixtures thereof.

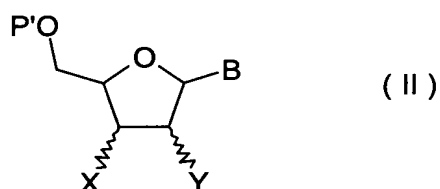
- 5.(Currently Amended) The process ~~Process~~ according to Claim 1, in which the said sulfide solution comprises a polar solvent ~~chosen selected~~ selected from the group consisting of a dipolar aprotic solvent, water, and mixtures thereof ~~solvents and water, preferably water.~~

- 6.(Currently Amended) The process ~~Process~~ according to Claim 1, in which [[the]] said sulfide solution comprises the chosen alkali metal sulfide or alkaline-earth metal sulfide in an amount of at least one molar equivalent relative to the divalent zinc starting material, preferably in slight excess.

- 7.(Currently Amended) The process ~~Process~~ according to Claim 1, in which the ~~said mineral sulfide is an~~ alkali metal sulfide ~~or alkaline-earth metal sulfide, preferably is~~ sodium sulfide.

- 8.(Currently Amended) The process ~~Process~~ according to Claim 1, further comprising removing ~~in which the precipitated zinc sulfide is removed by~~ filtration.

- 9.(Currently Amended) The process ~~Process~~ according to Claim 1, which further comprises ~~the reduction reaction of~~ reducing the double bond of the compound of formula I to give the corresponding 2',3'-dideoxynucleoside of formula



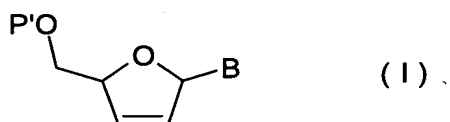
in which $X = Y = H$, and

P' represents an acyl group $RCO-$, in which R represents a C_1-C_5 alkyl or a group $R^1COOC(R^2R^3)-$, in which R^1 , R^2 and R^3 represent a C_1-C_5 alkyl;

B represents an optionally substituted natural purine or pyrimidine base

~~P' and B have the meanings given above.~~

- 10.(Currently Amended) The process ~~Process~~ according to Claim 1, which further comprises the deprotection reaction of a compound of formula

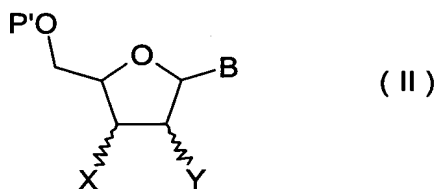


in which P' represents a protecting group P , and B represents an optionally substituted natural purine or pyrimidine base ~~has the meanings given above,~~

to give the corresponding compound of formula I,

in which P' represents hydrogen.

11.(Currently Amended) Process according to Claim 9, which further comprises the deprotection reaction of a compound of formula



in which P' represents a protecting group P, X and Y represent H, and B represents an optionally substituted natural purine or pyrimidine base ~~has the meanings given above,~~
to give the corresponding compound of formula II,
in which P' represents hydrogen.

12.(Currently Amended) The process of claim 1, wherein the 2',3'-dideoxy-2',3'-dideoxynucleoside is selected from the group consisting of ~~Process for preparing 5-fluoro-2',3'-dideoxy-2',3'-dideoxy-β-D-cytidine, stavudine, dideoxyadenosine, didanosine, [[and]] zalcitabine, and mixtures thereof which comprises a process according to Claims 1 to 10.~~

13.(New) The process of claim 1, wherein B is selected from the group consisting of adenine, inosine, 5-F-cytosine, hypoxanthine, thymine, and mixtures thereof.

14.(New) The process of Claim 1, wherein said activating agent is selected from the group consisting of ammonium salt, phosphonium salt, and mixtures thereof.

15.(New) The process of Claim 1, wherein said sulfide solution comprises the alkali metal sulfide or alkaline-earth metal sulfide in an amount greater than one molar equivalent relative to the divalent zinc.

16.(New) The process of claim 2, wherein R¹ is methyl.